

Serial No.: 09/580,223

### **REMARKS**

Claims 1-13 remain pending in the application. Favorable reconsideration of the application is respectfully requested.

#### ***I. REJECTION OF CLAIMS 1-10 BASED ON OBVIOUSNESS-TYPE DOUBLE PATENTING***

Claims 1-10 remain rejected under the judicially created doctrine of obviousness-type double patenting in view of *USP 6,021,266 to Kay*.

Applicants continue to respectfully disagree with the Examiner regarding claims 1-10 of the present application being simply obvious variations of the claims in *Kay '266*. Applicants believe the claims are different for the reasons expressed in applicants' previous response. However, the rejection remains moot unless and until the below discussed rejection under §102(b) based on corresponding *Kay '245* is traversed.

Applicants are willing to consider filing a terminal disclaimer to overcome the present rejection upon resolution of the remaining rejection. For the reasons stated below, however, it is believed that *Kay* neither anticipates nor renders obvious the presently claimed invention. Consequently, applicants respectfully request the Examiner to reconsider the basis for the rejection upon applicants successfully traversing the rejection of the claims under §102(b).

#### ***II. REJECTION OF CLAIMS 1-13 UNDER 35 USC §102(b)***

Claims 1-13 remain rejected under 35 USC §102(b) based on *Kay (UK Patent App. 2,317,245)* (hereinafter *Kay* or *Kay '245*).<sup>1</sup> This rejection is respectfully traversed for at least the following reasons.

Regarding applicants' previous arguments that *Kay* does not teach or suggest "one-to-many" type of send-receive communications as recited in claims 1 and 11, the Examiner argues that such "one-to-many" send-receive communications would

---

<sup>1</sup> Applicants note that *Kay '245* is the priority document for *Kay '266*.

Serial No.: 09/580,223

*inherently* result based on the operation described in Kay. (See, e.g., Office Action, page 14). Applicants respectfully disagree for at least the following reasons.

Claim 1 recites "a method of transferring data from a sender process to a plurality of receiver processes", and "the method uses a language construct which effects synchronized communication between the sender process and the receiver processes". Claim 11 recites a similar apparatus configuration.

The above recited features have the advantage that a designer does not need to build an ad-hoc synchronizing circuit. (See, e.g., Spec., p. 11, Ins. 19-20). Such features also provide a less expensive implementation to multiple receivers, leading to faster and smaller hardware and software implementations. (Id., p. 11, ln. 22 to p. 12, ln. 1).

As applicants argued previously, claims 1 and 11 both refer to transferring data in which a single send can be matched by a plurality of receives. Synchronized communication may be effected between the sender process and the plurality of receiver processes. Kay '245 does not teach or suggest such "one-to-many" type of send-receive communication as recited in present claims 1 and 11. Rather, Kay '245 teaches only a "one-to-one" type of send-receive communication. Each send is matched by only one receive. There is no construct for effecting synchronized communication between a sender process and a plurality of receiver processes.

The Examiner contends that Fig. 2C of Kay '245 shows the "one-to-many" send-receive communications recited in claims 1 and 11. However, the Examiner does not appear to consider the element of the claim language in its entirety.

For example, claim 1 recites a *language construct* which effects synchronized communication between the sender process and the receiver processes. Fig. 2C of Kay '245 shows a diagram of a *control path* that is synthesized by the compiler. (See, e.g., Kay '245, p. 8, 3<sup>rd</sup> paragraph). The *control path* relates to the *output* of the compiler while the *language construct* of claim 1 relates to the *input* of the compiler. These are not equivalent, and a teaching for the control path does not teach or suggest a teaching for the language construct.

Serial No.: 09/580,223

*Kay '245* teaches that each channel communicates data in a point-to-point (or one-to-one) fashion, and each of the two communicating processes must wait for the communication to be completed before continuing. (See, e.g., *Kay '245*, p. 17, bullet-pointed paragraph). The description that each channel is point-to-point clearly teaches that a channel does not allow one-to-many communication as recited in claims 1 and 11. Similarly, the recitation that each of the two communicating processes clearly shows that the channels of *Kay '245* do *not* connect a sender process to a plurality of receiver processes. Thus, applicants respectfully disagree with the Examiner's characterization that *Kay '245* must inherently teach "one-to-many" type of send-receive communications as recited in claims 1 and 11.

Furthermore, applicants respectfully disagree with the Examiner's assertion that the channels in *Kay '245* are two-way because this is required to ensure that slave and master processes start and end at the correct times. The Examiner's statement is directly contradicted by *Kay '245* at page 16, last paragraph, which recites that channels are unidirectional. Fig. 2C of *Kay '245*, which the Examiner uses as a basis for reasoning that channels are two-way, shows control paths and *not* channels. (See, e.g., p. 8, 3<sup>rd</sup> paragraph).

Furthermore, Fig. 7C and 10B of *Kay* show how a channel may be constructed as a circuit. In this circuit there is more than one possible sender processes and more than one possible receiver processes. However, the language rules (column 9, lines 2; channels are point to point; column 10, lines 3-7: usage rules as in *occam*) insure that at most one of the possible sender and at most one of the receivers can participate in any given communication using this channel. The circuit would not achieve correct results if this were not the case. Thus, *Kay* does not anticipate one-to-many synchronized communication as recited in claims 1 and 11.

For at least the above reasons, applicants again respectfully request withdrawal of the rejection.

Serial No.: 09/580,223

### III. CONCLUSION

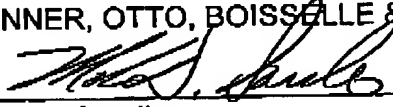
Accordingly, all claims 1-13 are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

  
Mark D. Saralino  
Reg. No. 34,243

DATE: February 17, 2004

The Keith Building  
1621 Euclid Avenue  
Nineteenth Floor  
Cleveland, Ohio 44115  
(216) 621-1113  
C:\GENIYAMA\iyamap713.asf.wpd